

Sandhill Lovegrass, PMT-338  
Performance, Management, Use

In 12 averaged clippings made during a two-year period at six locations (Carrizo Springs, Eastland, Mason, Seminole, Midland, Robert Lee, Texas) PMT-338 produced an average of 810 pounds more forage per acre than commercial.\* The increased yield was equivalent to 1.74 over commercial.

PMT-338 starts growth 2 to 3 weeks earlier than commercial in the spring. <sup>his</sup> growth is ahead of the other native warm season grasses by 2 to 4 weeks. It initiates growth in late January or February in the southern Edwards Plateau and northern Rio Grande Plain. Further north growth starts in March when moisture and soil temperatures are favorable.

Seed production will range from 50 to 200 pounds per acre dryland. Under irrigation yields of 400 to 600 pounds per acre can be obtained with proper management. The long seed inflorescences ripen unevenly, but resist shattering fairly well, except in extremely windy conditions. Seed can be harvested with a combine providing the air flow is reduced and any large cracks or holes are repaired. The seed units average about the same size as sand lovegrass, about 1,500,000 per pound.

PMT-338 sandhill lovegrass is very palatable to livestock, particularly during the late winter and early spring months when it is making rapid growth. It becomes less attractive to livestock during the later stages of growth as seed heads start to form. Frequently it will contain many short green leaves at the base of the plant during the late fall and winter months and is utilized by livestock as a source of green feed during this period.

PMT-338 seedlings are slow to germinate and develop in the early seedling stages. Reports have been received where seed has remained in the soil for one full growing season and germinated in the following spring. For this reason, it is best to give the seeded area two full growing seasons deferment from grazing. Volunteer seedlings will become established from shattered seed, but it is not as aggressive in its spreading habits as some other introduced and native plants.

T-338 responds to nitrogen fertilizer and maximum seed yields cannot be obtained unless a good fertilization program is used. An increased seed yield of approximately 500 pounds resulted from an application of 90 pounds of nitrogen in one irrigated seed production field. Forage production is increased with the application of fertilizer, but proportionately much less than with weeping lovegrass.

PMT-338 is not a grass that can be pushed for maximum forage production in a pasture situation. It will not respond to fertilization and give high forage production like weeping lovegrass. It should be planted in rangeland as a part of the range seeding mixture; not in pure stands for intensively-managed pasture.

\* Commercial refers to the average lot of sand lovegrass available in the Texas seed trade. Most of this seed is harvested in the northern High Plains area of Texas and Oklahoma approximately 200 miles north of the adapted area of PMT-338.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Soil Conservation ServiceVARIETIES OF CONSERVATION PLANTS

Species: Eragrostis trichodes (Nutt.) Wood  
sand lovegrass

Accession  
Number(s): **PM-T-338**

Origin: Collected in 1957 by Mason, Texas SCS work unit personnel  
from a native stand near that town.

Method of  
Selection: Multiplication of seed from the original collection  
without attempts at selection because this accession,  
as might be expected from its origin, begins active  
growth earlier and continues later in the fall than the  
form available in the market.

Description: Leafy perennial, warm-season bunchgrass, three to four  
feet tall at seed maturity. It is earlier in habit than  
the market variety which originated in northwest Oklahoma.  
An excellent seed producer. Otherwise characteristic of  
the species.

Adaptation: The sand lovegrasses are best adapted to sandy and sandy  
loam soils, and native to sandy rangeland. This accession  
appears superior at **Knox** City to the market variety, and  
should have value for planting south of the point where  
the market variety is not adapted.

Natural area for the species extends from Illinois to  
Colorado and Texas.

Use: The species has been known for many years for its ease of  
establishment in range and pasture plantings, and for its  
attractiveness to cattle.

USDA-SCS-RTSC  
Fort Worth, Tex.  
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**SAND LOVEGRASS (Eragrostis trichodes)**

**DESCRIPTION:** 2' - 4' tall, leafy, extremely palatable pative perennial bunchgrass found generally throughout the sandier, western half of the State.

**ADAPTATION:** Best adapted to the light, sandy soils in the 18 to 35 inch rainfall belt, but appears to thrive also in heavier soils. It spreads rapidly by volunteering. It constitutes only a minor portion of the total plant population and under indiscriminate grazing usually tends to seek the protection of woody plants where available. In pure or nearly pure stands, however, where grazing can be controlled, it produces a large amount of palatable herbage early in the spring before other Summer grasses furnish much grazing. This vigorous growth continues throughout the Summer. In most cases no pasture seedings should be made in sandy and semi-sandy land without the addition of some sand lovegrass to the mixture.

**PLANTING:**

**Time:** If the seeding is to be in a prepared stubble, it should be made in the spring before weeds start growth. If in clean tilled land, it should be made after the ground has become warm and one or more crops of weeds have been killed. If overseeded on rangeland, February or early March at the latest.

**Rate:** In terms of pure live seed per acre:

- a. In rows, .5 pounds.
- b. Broadcast, 1.0 pounds.
- c. In mixture, .5 pound.

Planting in rows is not recommended except for the production of seed.

**Depth:** Approximately  $\frac{1}{4}$  to  $\frac{1}{2}$  inch in broadcast or drilled seedings. In freshly worked land, or very sandy soil, the seed need not be covered.

**Method:** Drill, broadcast or plant in rows, preferably in a close drilled sorghum stubble from the previous crop year. Where there is little danger of blowing or severe erosion by water, seedings may be made in clean-tilled land which has been worked in such a manner as to leave the surface firm. In most instances, even where there is little danger of soil blowing, the use of a protective stubble and hay mulch would be found most satisfactory for the prevention of sheet erosion and "crusting" after seeding. Broadcast seedings should be covered lightly, using a cultipacker, a disk set straight, or a disk drill.

**USES:** Chiefly grazing.

**MANAGEMENT:** Cultivation - Mow as necessary to control weeds, or cultivate as for any other crop if planted in rows.

Harvesting - For seed - Best seed yields obtained by cutting with binder as soon as mature, colored seeds can be found in the tips of the upper branches of the seedheads. At this stage most of the seeds in the lower branches will have reached the hard dough stage and will ripen satisfactorily after the material is cut. Thresh with any ordinary separator or combine after the seed material is cured in shock. An alternative method which ordinarily results in the loss

of considerable **seed is** to combine the standing crop, If this method is employed, **harvest** should **be-delayed** until the majority of seeds are **mature**.

Yielde - 100 to 500 pounds per **acre**.

Grazing - Grazing should **be** withheld **the** first mason **but**, depending upon the plant **development**, may usually begin during the first winter and continue thereafter throughout, the year **as** with **any** other grass. Crazing should **be** controlled in such a manner that the plants are not eaten **below a** height of about 3 or 4 **inches**.